

I CLAIM:

8. An exercise device, comprising:

a frame having a front end and a rear end;

10 a carriage supported on said frame and adapted for user engagement, said carriage further adapted for generally reciprocating movement between said ends;

a dynamic member capable of movement in a first direction;

a means for providing first resistance between said carriage and said dynamic member, said first resistance urging said carriage in said first direction;

a means for engaging said carriage against said dynamic member to enable the user to propel said carriage in a second direction; and

a means for maintaining said carriage between said ends.

9. An exercise device as defined in claim 8 wherein said carriage is a seat.

10. An exercise device as defined in claim 8 wherein said carriage is a shoe.

11. An exercise device as defined in claim 8 wherein said dynamic member is driven by a motor.

12. An exercise device as defined in claim 11 wherein at least one of said ends of said frame are adjustable above a support surface, whereby said frame is capable of inclining and/or declining with respect to said surface.

5 13. An exercise device as defined in claim 11, wherein said motor provides a varying speed, whereby the speed increases as the average position of said carriage moves towards said front end and decreases as the average position of said carriage moves towards said rear end.

10 14. An exercise device as defined in claim 8 wherein said dynamic member is coupled to a flywheel causing a rotation thereof when said carriage is moving in said first direction.

15. An exercise device as defined in claim 14 wherein said front end of said frame is adjustable above a support surface.

16. An exercise device as defined in claim 8 wherein said means for engaging includes a one-way clutch.

17. An exercise device as defined in claim 8 wherein said means for maintaining includes a means for providing a second resistance to said dynamic member whereby said second resistance decreases as the average position of said carriage moves towards said front end and increases as the average position of said carriage moves towards said rear end.

18. An exercise device as defined in claim 8 wherein said means for maintaining includes a stop near said front and said rear ends of said frame.

25 19. An exercise apparatus, comprising:

a frame having a front end and a rear end, said front end of said frame is adjustable above a support surface;

5 a carriage supported on said frame and adapted for user engagement, said carriage further adapted for generally reciprocating movement between said ends;

a dynamic member coupled to a flywheel causing a rotation thereof when said carriage is moving in said first direction.

10 a means for providing resistance between said carriage and said dynamic member, said resistance urging said carriage in said first direction;

a means for engaging said carriage against said dynamic member to enable the user to propel said carriage in a second direction; and

a means for maintaining said carriage between said ends.

15 20. An exercise apparatus as defined in claim 19 wherein said carriage is a seat.

21. An exercise apparatus as defined in claim 19 wherein said carriage is a shoe.

20 22. An exercise apparatus as defined in claim 19 wherein said means for engaging includes a one-way clutch.

23. An exercise apparatus as defined in claim 19 wherein said means for maintaining includes a means for providing a second resistance to said dynamic member whereby said second resistance decreases as the average position of said carriage moves towards said front end and
25 increases as the average position of said carriage moves towards said rear end.

24. An exercise apparatus comprising:

a frame having a front end and a rear end;

a carriage supported on said frame and adapted for user engagement, said carriage further

5 adapted for generally reciprocating movement between said ends;
a dynamic member driven by a motor;
a means for providing resistance between said carriage and said dynamic member, said
resistance urging said carriage in a first direction;
a means for engaging said carriage against said dynamic member in a first direction to
10 enable the user to propel said carriage in a second direction; and
a means for maintaining said carriage between said ends.

25. An exercise apparatus as defined in claim 24 wherein said carriage is a seat.

15 26. An exercise apparatus as defined in claim 24 wherein said carriage is a shoe.

27. An exercise apparatus as defined in claim 24 wherein said means for engaging is a one-way clutch.

20 28. An exercise apparatus as defined in claim 24 wherein said means for maintaining include a carriage stop near said front and said rear ends of said frame.

25 29. An exercise apparatus as defined in claim 24 wherein at least one of said ends of said frame is adjustable above a support surface whereby said frame is capable of inclining and/or declining with respect to said surface.

30. An exercise apparatus as defined in claim 24 wherein said motor provides a varying speed, whereby the speed increases as the average position of said carriage moves towards said front end and decreases as the average position of said carriage moves towards said rear end.